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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,263	10/24/2001	Tom C. Xu		6959

7590 06/26/2003
Tom C. Xu
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Castra Valley, CA 94552

EXAMINER

SNAY, JEFFREY R

ART UNIT	PAPER NUMBER
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1743

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DATE MAILED: 06/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. 10/038,263		Applicant(s) XU, TOM C.	
Examiner Jeffrey R. Snay		Art Unit 1743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5, 8-11 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Pugh ('103).

Pugh disclose an optical sensor which includes all of the presently claimed elements. See Figures 1-3 of Pugh disclosing the sensor as comprising a disposable tip (10) including a reagent pad (12) mounted by adhesive (18) to one end and a detection housing (30) comprising a light source (38), light detector (40) and display (50, Figure 10) releasably attached to the other. The reagent pad includes chemical reagents, including enzymes, suited toward the colorimetric detection of glucose (see column 7, lines 1-22). It is noted that instant claim 1 recites an optical fiber for communicating the detection device with the reagent pad. Because Pugh disclose the optical transmission characteristics of the disposable tip (10) at column 6, lines 10-13, it is evident that such disposable tip operated as an optical fiber in that it transmitted light to and from the reagent pad. Regarding the presently recited micro tubing in claim 8, it is noted that the term provides no structural definition other than the ability to transmit light to and from the reagent pad, which ability would have been required for operation of the claimed device as an optical sensor. As such, the disposable tip (10), which

analogously transmits light to and from the reagent pad, is viewed as the presently recited micro tubing.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pugh ('103) in view of Hauenstein et al ('727).

The sensor of Pugh, as described above, differs from the claimed invention in that it fails to positively state the material from which the disposable tip (10) is constructed. However, as further described above, Pugh teaches that such tip is fabricated so as to transmit light. The use of glass, plastic or combinations thereof in the construction of optical waveguiding structures for transmitting light to and from a

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reagent pad were notoriously well known in the art, as evidenced by Hauenstein et al (column 1, lines 54 et seq). It would have been obvious to one of ordinary skill in the art to fabricate the optical element (10) of Pugh out of glass and/or plastic in view of their known suitability as materials for that purpose, as per the teaching of Hauenstein et al ('727).

6. Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pugh in view of Walt et al ('490).

The sensor of Pugh, as described above, differs from the claimed invention in that it fails to teach sonic welding as an alternative means for attachment of the reagent pad to the optical support. However, Walt et al disclose an optical sensor in which a reagent pad is attached to an optically transparent support for the purpose of transmitting light to and from the reagent pad. Walt et al specifically teach that attachment of the reagent pad by either adhesive or sonic welding were known and suited to the stated purpose (column 10, lines 55-58). It would have been obvious to one of ordinary skill in the art to substitute sonic welding for the adhesive taught by Pugh as an art recognized equivalent for attaching a reagent pad to an optical substrate in an optical sensor, as per the teaching of Walt et al.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Curry also teaches a disposable fiber tip containing a reagent

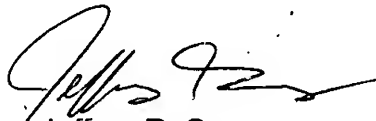
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pad for use in an optical sensor. Thus, Curry also anticipates the same claims as rejected over Pugh, above.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey R. Snay whose telephone number is (703) 308-4032. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on (703) 308-4037. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Jeffrey R. Snay
Primary Examiner
Art Unit 1743

jrs
June 24, 2003